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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------------|------------------|
| 10/800,596 | 03/15/2004 | Jeffrey A. Von Arx | 279.348US2 | 1790 |
| 21186 7590 03/07/2007 SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402 | | | EXAMINER SCHAETZLE, KENNEDY | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3766 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 03/07/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/800,596

Applicant(s)

VON ARX ET AL.

Examiner

Kennedy Schaetzle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>3/15/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-5, 8-10 and 12-17 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 6,456,256. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the present invention is merely broader in scope than claim 1 of the patent. Once the applicants have received a patent for a species or more specific embodiment, they are not entitled to a patent for the generic or broader invention (see *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993)). Regarding the use of a helically wound antenna such as claim 5, it is old and well-known in the telemetry art to make antennae out of coiled conductors. Similar comments to those made above apply to the patentably indistinct method claims.

3. Claims 1-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,708,065. Although the conflicting claims are not identical, they are not patentably distinct from

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each other because the claims of the present invention are merely broader in scope than the claims of the patent. Once the applicants have received a patent for a species or more specific embodiment, they are not entitled to a patent for the generic or broader invention (see *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993)).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4, 12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Villaseca et al. (Pat. No. 6,169,925).

Regarding claims 1-3, Villaseca et al. show in Fig. 7 a housing 122 containing electronic circuitry with an antenna 134 connected thereto via feedthroughs and molded into a dielectric compartment 138 which is adjacent to the surface of the housing.

Regarding claim 4, Villaseca et al. teach that it is desireable to provide the capability of broadcasting signals beyond the range of inductive coupling with the use of radio waves. The antenna is dimensioned so as to accommodate such transmission and reception (note for example col. 9, lines 1-14 and 61-67).

Concerning claim 5, Villaseca et al. state that

Regarding claim 14, all comments made in the rejection of claim 1 applies here as well. The examiner considers the gold-plated plastic antenna loading tab 104 to represent a loading capacitance. Considering it is the desire of Villaseca et al. to transmit RF signals over a distance, a significant portion of the RF energy delivered to the antenna would be far-field radiation.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-9 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Villaseca et al. (Pat. No. 6,169,925) in view of Goedeke et al. (Pat. No. 5,683,432).

In reference to claim 5, Villaseca et al. do not disclose the use of a helically coiled antenna. Such antenna configurations are old and well-known as shown by Goedeke et al. which teach that typical implantable medical device antennae may take the form of a coil (col. 13, lines 59-67) or a radiating monopole antenna in the form of pacing lead wire such as shown by Villaseca et al. in Fig. 6a. Clearly in view of Goedeke et al. the choice of antenna design would have been considered a matter of obvious design by those of ordinary skill in the art, with the exact form dependent on a variety of factors including but not limited to, the frequency of transmission. In short, any antenna suitable to perform the basic function of transmitting and receiving electromagnetic waves in an implantable medical device would have been considered acceptable.

Regarding claims 6 and 7, the device of Villaseca et al. shows an antenna oriented roughly parallel or roughly perpendicular to a surface of the device housing depending simply upon which surface of the housing one chooses to reference from. In addition, whether one chooses to employ an antenna located roughly parallel to the housing or roughly perpendicular to the housing would have been considered a matter of obvious design by those of ordinary skill in the art given the fact that monopole and dipole antenna arrangements are old and well-known. Again, various factors including implant size and housing configuration, as well as transmission frequencies would have played a role in the selection process. Concerning the electrical length of the antennas, those of ordinary skill in the antenna design arts have long known the relationship

between wavelength and antenna dimension in the efficiency of operation. The laws of physics dictate said relationship.

Regarding claims 8 and 9, the examiner once again considers the loading tab to constitute a capacitance. In any event, the use of a capacitance or an inductance to tune an antenna is old and well-known in the prior art (see for example Fig. 3A of the Goedeke et al. reference). The choice to use a variable tuning capacitor for adjusting the resonant frequency would have been considered a matter of obvious design by those of ordinary skill in the art as a means to fine tune the antenna in order to more effectively account for less than ideal circuit components and concomitantly improve reception and broadcasting efficiency. The examiner takes Official Notice that antennae with variable tuning capacitors are old and well-known in the art.

The rejection of claims 17-19 parallel the rejections of like claims above.

Conclusion

8. This is a Continuation of applicant's earlier Application No. 09/798,249. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

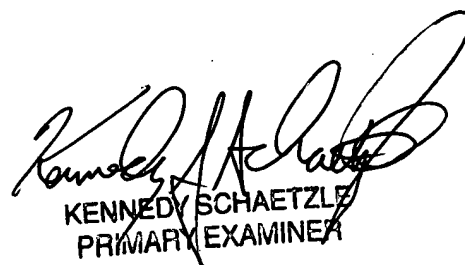
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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kennedy Schaetzle whose telephone number is 571 272-4954. The examiner can normally be reached on M-F from 9:30 -6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Layno can be reached on M-F at 571 272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KJS
February 25, 2007


KENNEDY SCHAETZLE
PRIMARY EXAMINER